

PROJECT COMPLETION REPORT

PROJECT NAME: DELTA MANAGEMENT FORT ST. PHILLIP

CWPPRA/STATE PROJECT NO: BS-11

Report Date: January 4, 2007

By: ABMB Engineers, Inc.

1. Project Managers/Contracting Officer:

DNR Project Manager	Ralph Libersat	Telephone	(225)-342-1952
DNR Field Engineer Supervisor	George Boddie	Telephone	(504)-280-4067
DNR Construction Project Manager	Tom Bernard	Telephone	(504)-280-4071
DNR Monitoring Manager	Melissa Hymel	Telephone	(504)-280-4074
Federal Sponsor, U.S. Fish and Wildlife Service	Kevin Roy	Telephone	(337)-291-3120

2. Location and description of project as approved for construction.

The project area is located on the east side of the Mississippi River in Boothville, Louisiana in Plaquemines Parish. It is located at the site of the old Fort St. Phillip across the river from Fort Jackson at approximate River Mile 19.0 AHP. The site is accessible by boat only. The nearest boat launch is located on the west bank of the Mississippi River on Highway 23.

This project was intended to enhance marsh growth by diverting fresh water and sediment through six newly constructed crevasses into shallow, open-water receiving areas. The project consisted of work in two areas. Area 1 was 174 acres of emergent marsh and 678 acres of open water. Area 2 contained three triangular-shaped regions and 126 acres of emergent marsh and 327 acres of open water. Three Crevasses were constructed in each of the two areas. Earthen terraces were also constructed in Area 1 to further trap sediments, promote marsh-building processes and offset land loss.

3. Final, as-built features, boundaries and resulting acreage.

The principle features include:

Area 1, Terraces: 98 terraces, 200 ft. in length, 10 ft. crown width, 52 ft. base width.

Crevasse 1A: 2000 ft. x 75 ft. x -8.0 ft. NAVD 88

Crevasse 1B: 400 ft. x 75 ft. x -6.0 ft. NAVD 88

Crevasse 1C: 700 ft. x 75 ft. x -6.0 ft. NAVD 88

Crevasse Alt. 2A: 732 ft. x 75 ft. x -8.0 ft. NAVD 88

Crevasse 2B: 500 ft. x 75 ft. x -6.0 ft. NAVD 88

Crevasse 2C: 2000 ft. x 75 ft. x -6.0 ft. NAVD 88

Area 2, Crevasses: An estimated 94,066 cubic yards of dredged material was removed from the crevasses and placed into adjacent designated disposal areas to elevation +5.0.

4. Key project cost elements

	CWPPRA Project Cost Estimates (Total Project)	Cost Incurred as of Construction Completion (Total Project)
Construction	\$ 1,622,918.00	\$1,015,533.80
E&D	\$ 225,488.00	\$ 225,488.00
Land rights	\$ 78,543.00	\$ 78,543.00
Monitoring	\$ 364,159.00	\$ 12,486.73
O&M	\$ 841,700.00	-0-
USACE, Project Management	\$ 21,051.00	\$ 21,051.00
Total	\$ 3,153,859.00	\$ 1,353,102.53

5. Items of Construction

Item	Work	Est. Quan.	Unit	Estimated Unit Price (\$)	Estimated Amount (\$)	Final Quantity	Bid Unit Price (\$)	Final Amount	%Over
1	Mobilization and Demobilization	1	Job	125,000.00	125,000.00	1	125,000.00	\$125,000.00	0
2	Area 1 Terraces	19,600	L.F.	23.90	468,440.00	19,500	23.90	444,396.60	-0.6
3	Crevasses	106,375	C.Y.	4.30	457,412.50	94,066	4.30	404,486.80	-12.0
4	Signs	5	Each	4,000.00	20,000.00	5	4,000.00	20,000.00	0
	Base Bid			1,070,852.50	1,070,852.50	N/A		1,015,533.80	-5.0

6. Construction and construction oversight.

ITEM	Construction Unit
Prime construction contractor:	Manson Gulf LLC
Subcontractor:	CSSI Marsh Buggys
Original construction contract:	\$ 1,070,852.50
Change Orders: 3	-\$ 55,318.70
Over/Under Runs:	-\$ 55,318.70
Damages:	\$ 0.00
Total Construction Contract Cost:	\$ 1,015,533.80
Construction Oversight (ABMB Engineers, Inc.)	\$ 68,023.00

7. Major equipment used.

Dredge Acadia: Spud Barge Mounted Manitowoc 4600 with a 7-yard bucket
2- Track hoes mounted on floating skid Marsh Buggies

8. Discuss construction sequences and activities, problems encountered, solutions to problems etc.

- By addendum, the period of performance was increased from 80 calendar days to 120 calendar days and the hours of operation revised to allow 24-hour operation.
- The dredge Acadia was the first equipment to mobilize to the site. They started the Crevasse excavation on June 24, 2006 and completed all Crevasses on August 7, 2006.

- The contractor performed the magnetometer survey on June 23, 2006 and laid out terraces.
- Trackhoes mounted on marsh buggies began placing material into terraces. Almost immediately they experienced delays due to high tides floating the equipment out of position. Delays due to high tides and high winds continued throughout the project, which resulted in two change orders for additional time.
- Warning signs were installed as the last item.
- All work was completed on November 20, 2006. The final inspection was held at the site on December 4, 2006, and the project was accepted.

9. Construction change orders and field changes

- Change Order 01- Extended the contract completion date from October 16, 2006 to November 16, 2006 due to unusual weather conditions caused by high tides.
- Change Order No. 2 - Extended the contract completion date from November 16, 2006 to December 4, 2006 due to unusual weather conditions caused by high tides.
- Change Order No. 3 – Adjusted the final contract amount for underruns in estimated quantities for Item No. 2 (Area 1 Terraces) and Item No. 3 (Crevasses).
- Field Order Change Number One: This field change allowed the Contractor to modify terraces C-1, D-3, E-5, and F-6 in Area 1 in order to maintain the fifty-foot minimum pipeline clearance. The terraces were modified as follows: Terrace D-3 was reduced in length by fifty feet; Terrace E-5 by thirty feet; Terrace F-6 twenty feet; and Terrace C-1 was moved fifty feet east along the same centerline and was not reduced in length.

10. Pipeline and other utility crossings

Structure	Representative to Contact
Shell Pipeline Co. (Equillion), 16"	Jason Elmore phone 504-728-4821
Koch Pipeline Co., 16"	Mike Demetz Ph. 337-988-6498
Transcontinental Gas Pipeline, 8"	Floyd Domingue Ph. 225-687-3900 ext. 261
Chevron Pipeline Co., 10" and 16"	Ph 504-592-7718
Southern Natural Gas Co., 8"	Kurt Cheramie, Ph. 504-868-6785
Panaco, Inc., 4	Lois Kidd, Ph. 713-970-3100

11. Safety and Accidents

No accidents to report.

12. Additional comments pertaining to construction

An addendum was issued prior to bid opening to allow the contractor to work 24 hours a day. The historical records should be reviewed to determine if the tidal ranges during this time period require larger equipment in order to compensate for high tides and high winds. Also, the weather delays pushed the vegetative plantings into the migratory bird season. Migratory waterfowl ate the newly planted grasses.

13. Significant Construction Dates: Purchase Order No. 3024067

Bid Opening-----	February 21,2006
Construction Contract Award-----	May 19, 2006
Preconstruction Conference-----	June 8, 2006
Notice to Proceed-----	June 16, 2006
Mobilization-----	June 19, 2006
Dredge Acadia mobilized-----	June 24, 2006
Construction Start-----	June 19, 2006
Construction Completion-----	November 20,2006
Final Acceptance-----	December 4, 2006

After mobilization on June 19, 2006, the dredge Acadia removed approximately 27,000 cubic yards of material at Crevasse site 1-B from June 24 thru June 30. They moved to site 1-C on July 7 and completed that day. They moved to 1-A on July 8th and removed approximately 10,000 cubic yards of material. From July 21st to 30th approximately 56,062 cubic yards were removed from alternate site 2-C. They mobilized at Alt.2-A on July 31 and removed 12,633 cubic yards and proceeded to remove 10,888 cubic yards from 2-B. Completed all crevasses August 7th. Final quantity was based on cross sectional areas.

Track hoes Mobilized in Area 1 on June 23rd, but were on hold for utility representatives to mark the site until June 26, 2006. Track hoes completed all rows on November 20, 2006. A final inspection was made by the Engineer, LDNR, and USFWS; the contract was accepted as complete on December 4, 2006.